

AMENDMENTS TO THE CLAIMS

Claims 1-31 (Canceled)

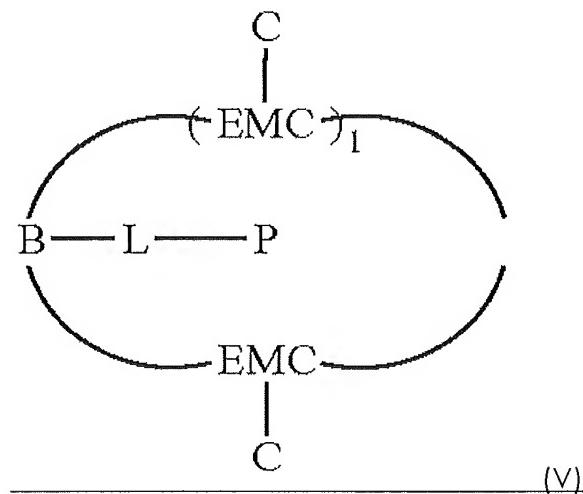
32. (Currently amended) A composition comprising:

- a hyperbranched polymer attached to a core B; and
- a biologically active moiety P;

whereby the biologically active moiety is attached to the core by means of a substantially non-enzymatically cleavable linker L

wherein the hyperbranched polymer contains at least two molecular chains, which molecular chains are of sufficient length to be so arranged as to form a cavity to accommodate the biologically active moiety, and wherein the molecular chains contain sterically demanding capping groups C;

further wherein the composition has the formula (V)



in which

B is the core, containing at least one unit of the group consisting of >CH-, >C< and respective analogs wherein H is replaced by an organic group; >N-; and >P-;

EMC are the molecular chains and comprise oxyethylene groups;
L is a non-enzymatically cleavable linker and comprises a carbamate group;
l is 1,2,3,4,5,6,7,8,9,10,11 or 12;
P is the biologically active moiety and is a protein or polypeptide;
and C is one or more of the capping groups comprising linear, branched, or
cyclical alkyl groups, in which hetero atoms, such as S, N, and O, may be present.

33. (Previously presented) The composition of claim 32, wherein the hyperbranched polymer is water soluble.

34. (Canceled)

35. (Canceled)

36. (Currently amended) The composition according to claim 32, wherein further groups are present in the polymer chains, the further groups being selected from the groups consisting of S, N, O, (-S-S)-, oxyethylene, oxypropylene and oxypropylene, oxybutylene, amide -C(O)NH- or C(O)NR-, amide -C(O)NH- or -C(O)NR-, -S-succinimido, amino (-NR-), carboxylic ester (-C(O)O-), sulfonamide (-S(O)₂-NR-), carbamate (-O-C(O)-NR-), carbonate (-OC(O)-O-), sulfone (-S(O)₂-), ether (-O-), oxime (-CR=N-O-), hydrazone (-CR=N-NR-), urea (-NR-C(O)-NR-), thiourea (-NR-C(S)-NR-), carbohydrate, glyceryl, phosphate (-O-P(O)(OR)O-), phosphonate (-P(O)(OR)O-), and saturated and nonsaturated (hetero)cyclic groups, in which R is H, a linear, branched or cyclical alkyl groups group which may contain further functional groups or hetero atoms.

37. (Canceled)

38. (Canceled)

39. (Currently amended) The composition according to claim 37 claim 32, wherein the capping groups C contain further groups selected from the groups consisting of S, N, O, (-S-S)-, oxyethylene, oxypropylene and oxybutylene, oxypropylene, oxybutylene, amide -C(O)NH- or C(O)NR- (-C(O)NH- or C(O)NR-), -S-succinimido, amino (-NR-) amino (-NR-), carboxylic ester (-C(O)O-), sulfonamide (-S(O)₂-NR-), carbamate (-O-C(O)-NR-), carbonate (-O-C(O)-O-),

sulfone (-S(O)₂-), ether (-O-), oxime (-CR=N-O-), hydrazone (-CR=N-NR-), urea (-NR-C(O)-NR-), thiourea (-NR-C(S)-NR-), carbohydrate, glyceryl, phosphate (-O-P(O)(OR)O-), phosphonate (-P(O)(OR)O-), and saturated and nonsaturated (hetero)cyclic groups in which R is H, linear a linear, branched or cyclical alkyl groups group which may contain further functional groups or hetero atoms.

40-42. (Canceled)

43. (Withdrawn - Currently amended) The composition according to claim 32, wherein the biologically active moiety is selected from the group of protein- proteins or polypeptides consisting of ACTH, adenosine deaminase, agalsidase, albumin, alfa-1 alpha-1 antitrypsin (AAT), alfa-1 alfa-1 alpha-1 proteinase inhibitor (API), alteplase, anistreplase, ancrod serine protease, antibodies (monoclonal or polyclonal, and fragments or fusions thereof), antithrombin III, antitrypsins, aprotinin, asparaginases, biphalin, bone-morphogenic proteins, calcitonin (salmon), collagenase, DNase, endorphins, enfuvirtide, enkephalins, erythropoietins, factor VIIa, factor VIII, factor VIIIa, factor IX, fibrinolysin, fusion proteins, follicle-stimulating hormones, granulocyte colony stimulating factor (G-CSF), galactosidase, glucagon, glucocerebrosidase, granulocyte macrophage colony stimulating factor (GM-C'SF), (GM-CSF), phospholipase-activating protein (PLAP), gonadotropin chorionic (hCG), hemoglobins, hepatitis B vaccines, hirudin, hyaluronidases, iduronidase, immune globulins, influenza vaccines, interleukins (1 alfa alpha, 1 beta, 2, 3, 4, 6, 10, 11, 12), IL-1 receptor antagonists (rhIL-1ra), insulins, interferons (alfa alpha 2a, alfa alpha 2b, alfa alpha 2c, beta 1a, beta 1 b, gamma 1 a, gamma 1 b), keratinocyte growth factor (KGF), transforming growth factors, lactase, leuprolide, levothyroxine, luteinizing hormone, lyme vaccine, natriuretic peptide, pancrelipase, papain, parathyroid hormone, PDGF, pepsin, platelet activating factor acetylhydrolase (PAF-AH), prolactin, protein C, octreotide, secretin, sermorelin, superoxide dismutase (SOD), somatropins (growth hormone), somatostatin, streptokinase, sucrase, tetanus toxin fragment, tilactase, thrombins, thymosin, thyroid stimulating hormone, thyrotropin, tumor necrosis factor (TNF), TNF receptor-IgG Fc, tissue plasminogen activator (tPA), TSH, urate oxidase, urokinase, vaccines, and plant protein such as lectins and ricins.

44. (Withdrawn - Previously presented) The composition of claim 32, wherein the biologically active moiety is insulin.

45 – 56 (Canceled).

57. (Withdrawn – Currently amended) The composition of claim 32, wherein the cleavable linker L is a traceless prodrug linker and contains a hydrolysable ester bond which can be hydrolysed and [[a]] the carbamate.

58. (Withdrawn - Previously presented) The composition of claim 57, wherein the hydrolysable ester bond is a phenol ester.

59 – 61 (Canceled)

62. (Previously presented) A drug containing the composition of claim 32.

63. (New) The composition of claim 32, wherein 1 is 2 or 3 resulting in formulas (VII) and (VIII)

